### Response to Commentor No. 6

#### Withers, Elizabeth

From: Sent: To:

Penny McMullen Thursday, June 19, 2003 6:58 AM

Withers, Elizabeth James Bearzi: Steve Zappe

RE: CMRR #2 Subject:

Dear Ms. Withers:

I discovered that the word "not" was omitted from one of my sentences, which obviously changes the meaning.

I decided to resubmit my comments with the correction. Please discard my previously sent comment.

Sorry about the inconvenience. Penelope McMullen, SL

COMMENT ON DEIS FOR CMRR AT LANL

Dear Ms. Elizabeth Withers:

I am a Sister of Loretto and I am authorized to speak for the Loretto Community on

nuclear issues. I have been studying the effects of nuclear production since 1979,

and when I lived in New York I worked with Dr. Rosalie Bertell who is internationally

recognized for her studies on the effects of radiation on employees, on members of the U.S. Armed Services and on the general public.

The purpose of the Chemistry and Metallurgy Research Replacement (CMRR)

Project is to support the development of our nation's nuclear weapons. The NNSA

says that the CMRR building is needed to perform analytical chemistry and

materials characterization critical to current nuclear weapons stockpile stewardship activities conducted at LANL. The Draft EIS (DEIS) also states

Facility could provide AC and MC support capabilities for pit

manufacturing at LANL if a decision were made to not construct a new MPF." The NNSA

announced that it will not make any decisions as a result of these hearings that

change LANL's participation in its "Integrated Nuclear Planning" initiative, or

change DOE's selection of the Expanded Operations Alternative of

SWEIS for Continued Operation of LANL, including programmatic decisions that

require retaining CMR capabilities at LANL. I am writing to establish in the hearing

record that the American public knows that these activities are

destabilizing, and thus undermine our own security.

6-1: The NNSA notes the commentor's concern for the legality of CMR capabilities and the effect on national security. The U.S. Congress and the President ultimately direct the DOE's national security missions, including AC and MC capabilities and activities. CMR mission support activities at LANL are conducted in compliance with state, Federal, and international laws and regulations. Chapter 5 of the CMRR EIS describes applicable laws and regulations.

LAW	
In 1996 the International Court of Justice (ICJ) declared nuclear weapons to be illegal according to international law because of their harm to innocent civilians. We cannot claim that because mini-nukes are smaller, they are therefore not harmful to innocent civilians. This month Energy Undersecretary Linton Brooks, when asked if it was possible to develop a low-yield weapon without global fallout, answered "almost certainly not."  President Bush has declared a crusade against the "axis of evil." The ICJ's President Judge Bedjaoui, in giving his opinion, emphasized that nuclear weapons are "the ultimate evil." How do NNSA, DOE and LANL justify violating international law, causing the rest of the world to see the United States as a roque	6-2
nation?  Continuing the nuclear weapons mission of the CMRR building, whether in the new building or in the old building, also violates the Nuclear Non-Proliferation Treaty which the U.S. ratified in 1970 and renewed in 1995. In this treaty, the United States agreed to work toward total nuclear disarmament. In 2000 the United States recommitted itself to "an unequivocal undertaking to accomplish the total elimination of their nuclear arsenals" and agreed to remove plutonium and uranium from nuclear warheads and to negotiate within five years a treaty banning the production of weapons-grade nuclear material. How do NNSA, DOE and LANL justify violating this treaty, causing the United States to be known around the world as blatant liars?	6-3
The DEIS indicates that nonproliferation training will be totally eliminated from LANL operations, contrary to the LANL SWEIS which requires expanded operations at the CMMR to include training in support of nuclear nonproliferation.	6-4
The United States Constitution recognizes ratified treaties as "the supreme law of the land." How does the NNSA, DOE and LANL justify violating our own Constitution?	6-5

### Response to Commentor No. 6

- 6-2: The NNSA notes the commentor's position that nuclear weapons violate international law. While the manufacture and use of nuclear weapons is a subject of continuing national and international debate, this debate is beyond the scope of the *CMRR EIS*, which focuses on evaluating potential environmental impacts of the proposed action and alternatives. Chapter 4 of the *CMRR EIS* evaluates these potential environmental impacts. As previously stated, the DOE, NNSA and the University of California (as the contract manager and operator of LANL) are not violating international law through the conduct of congressionally-assigned mission support activities at LANL.
- **6-3:** The DOE, NNSA and the University of California at LANL are not in violation of the terms of the Treaty on the Non-Proliferation of Nuclear Weapons as is stated by the commentor. Continuing to provide the physical accommodations for CMR capabilities at LANL violates none of the terms of the referenced treaty.

As discussed in Section 1.1 of the *CMRR EIS*, the NNSA has developed a comprehensive program of stockpile stewardship and management that maintains essential capabilities for stockpile safety and reliability while meeting other legal and policy objectives. Stockpile stewardship capabilities are currently viewed by the United States as a means to further the nation's nonproliferation objectives. U.S. confidence in its stockpile stewardship capabilities are likely to remain important in future arms control negotiations as the Nation moves to further reduce its overall stockpile size.

6-4: The commentor's statement that nonproliferation training would be totally eliminated from LANL operations is incorrect. As discussed in Section 2.4.7 of the CMRR EIS, not all capabilities, either previously or currently conducted at the CMR Building, would be transferred into a new CMRR Facility. The activities identified in the CMRR EIS that would not move to the new CMRR Facility, including nonproliferation training, could continue to be conducted in the existing CMR Building if the necessary portions of that building are not decommissioned and demolished, or these activities could cease to be conducted anywhere at LANL. There are many other nonproliferation training activities and exercises conducted at various LANL facilities that would be unaffected by either the construction and operation of a new CMRR Facility or the decommissioning of the existing

SECURITY

the United States

increase the

The only effective way to convince other nations not to develop

weapons is for the nuclear powers to dismantle theirs. The more

continues to produce or even maintain nuclear weapons, the more

be encouraged to develop their own nuclear weapons, and thereby

chance that nuclear weapons will be used, even against U.S. citizens. The CMRR	6-6
building encourages, not discourages, other nations to build their own weapons of	
mass destruction and thus will most likely lead to a new nuclear arms race.	
. Concerned about the Bush administration's Nuclear Posture Review and	
Congress's recent approval of mini-nukes and the Robust Nuclear	
Earth Penetrator, Russia and China have already begun to consider modernizing their own nuclear weapons stockpile.	
The CMRR makes us more likely to become a target and makes us less	6-6
secure, not more secure. Our national security is best served by	(Cont'd)
cooperating with the United Nations in stringent international verification and control	. •
which is universally observed, including allowing verification inspections in our own country.	
The nations of the world do not trust that we will have nuclear	
weapons merely as a deterrent with no intention of using them. We are the only	
country that has actually used a nuclear weapon. It is now well-known that we did not have	
to drop the atomic bombs on Japan in order to end WWII. Even the very	
scientists who made the bombs opposed using them against Japanese civilians.	
Now the Bush administration has announced a policy of pre-emptive	
strikes on nations that it fears might be a potential threat. This leads	
other nations to worry that the United States might be a threat to them, and therefore to	
consider  pre-emptive strikes against us. LANL is now participating in	
making nuclear weapons that may be used offensively, despite that fact that this	
is against international law. This policy is more destabilizing than	
anything we have ever experienced in history.	
In the DEIS summary, the NNSA mission is listed. Part 4 states	· •
"promote international safety and nonproliferation" and Part 5 states	6-7
"reduce global danger from weapons of mass destruction." By accepting continued nuclear	
work at Los Alamos, the NNSA is working against its own mission.	
	∎i .
There are alternatives not listed in this DEIS. The Loretto Community offers the	6-8
alternative that the NNSA sincerely work for nuclear disarmament and the	
promotion of the Non-Proliferation Treaty. We cannot expect the rest of the world to	
disarm if we refuse to do so ourselves.	•
SAFETY	1
Nuclear weapons cannot protect us from terrorist attacks. All our weapons did not	6-9
3	

#### Response to Commentor No. 6

CMR Building, however. Many of these activities are planned for consolidation into a new building that was the subject of a 1999 environmental assessment (the Nonproliferation and International Security Center) identified as an action then under consideration in the *LANL SWEIS* referenced by the commentor (Chapter 1.6.3.1 of the SWEIS).

- 6-5: Article VI of the United States Constitution recognizes the Constitution itself, laws of the United States and Treaties made under the authority of the United States as the supreme law of the land. The NNSA's policies and activities comply fully with the United States Constitution. DOE, NNSA and the University of California at LANL have not violated the Constitution of the United States by pursuing congressionally-assigned missions and necessary mission support activities.
- **6-6:** The NNSA notes the commentor's concern that CMRR Facility activities would encourage other nations to build weapons of mass destruction that could lead to a new nuclear arms race. The continuing national and international debate on the manufacture and use of nuclear weapons is outside of the scope of the *CMRR EIS*, which focuses on evaluating potential environmental impacts of the proposed action and alternatives. Chapter 4 of the *CMRR EIS* evaluates these potential environmental impacts.
- 6-7: The NNSA notes the commentor's concern that the CMRR Facility would enhance the United States as a target leading to the nation being less secure and less stable rather than more secure against such action and more stable. To clarify the statement that NNSA is working against its own mission by continuing nuclear work at LANL, NNSA pursues congressionally-assigned missions and necessary mission support activities, including nuclear-related missions. In accordance with the directives of the National Defense Authorization Act of 1994, NNSA is confident that its nuclear missions reduce the danger from weapons of mass destruction. Section 1.1 of the CMRR EIS describes these missions.
- 6-8: The NNSA notes the commentor's support for nuclear disarmament and nuclear nonproliferation. Alternatives evaluated in detail in the *CMRR Draft EIS* are those that reasonably meet the NNSA's stated purpose and need for action. Section 2.5 of the *CMRR EIS* describes the alternatives evaluated in detail.

othe	help us on 9/11/01. On the contrary, having so many nuclear cons in our state makes our state a more likely target for attack, not only from er nation states, but also from terrorists. There have been numerous documented urity breaches at LANL, making all buildings and waste sites vulnerable to rorists. There are 765 kg of plutonium missing from LANL (that we know of).	6-9 (Cont'd)
wast	The DEIS provides no actual cost estimates to indicate how the A arrived at its figure of \$450 million for construction.  Spending so much money on the nuclear industry may be a total see of much needed funds for basic human needs in a struggling economy. For apple, LANL spent many millions on building radiation detection equipment, yet forces could not find any evidence of nuclear weapons in Iraq!  SEISMIC ACTIVITY	6-10
bene buil stud "oth cite the esti coul	One of the reasons for the need for the new building given in the / 23, 2002 Federal Register, is that there is a seismic fault trace located sath the current CMR building. However, the proposed locations for the new ding are close to the current building. The DEIS states that "slope stability dies have been performed," but does not give the results. It goes on to say that here geologic hazards due to seismic activityare considered low." The DEIS so recorded earthquakes in magnitude up to 4.5, but that does not eliminate possibility that a higher magnitude earthquake could occur, and some scientists mate the potential magnitude to be as high as 6.5. The fact that there de be greater seismic activity in the region is reason for DIScontinuing all with radioactive materials at Los Alamos.	6-11
not June woul the caus	The DEIS estimates a doubling of low-level waste, more than soling of hazardous waste, and a fourfold increase in mixed low-level waste, yet does explain how that waste will be disposed of. When I asked about this at the 4 hearing in Pojoaque, Ms. Withers said that the waste that does not go to WIPP do be put into Area G. But Area G will reach capacity by 2009 according to 1999 LANL SWBIS, and it is an unlined and therefore unsafe site for storage, sing over 3000 New Mexicans and 27 environmental organizations to call for immediate closing.	6-12
	LANL still has 38,000 drums of TRU waste stored at TA-54 in fabric  4	6-13

### Response to Commentor No. 6

**6-9:** The NNSA notes the commentor's concern about attacks on New Mexico by nation states and terrorists. While it is not possible to determine the motives and targets of terrorist's or nation states with certainty, NNSA and LANL give high priority to safety and security. As noted in a text box within Section 1.1 of the *CMRR EIS*, NNSA uses a graded approach to safeguards and security for SNM.

•10: While cost is one of the factors to be considered by decision makers in any Record of Decision, cost analysis is beyond the scope of the CMRR EIS, which focuses on evaluating potential environmental impacts of the proposed action alternatives. CMRR Project cost estimates are currently described in terms of a range (\$420M to \$955M) consistent with DOE Order 413.3 requirements for this phase of a project. The final detailed cost estimate for the project would be established at Critical Decision 2 (Approval of Performance Baseline) currently projected to occur in 2005 if the decision is to proceed with the CMRR Project. Congress determines funding allocations among DOE and NNSA projects; NNSA then spends monies consistent with this congressional direction.

11: The CMRR Draft EIS states in Section 3.5.1.3 that slope stability studies have been performed at LANL where a hazard has been identified. Slope stability study results vary given the circumstances of the site under investigation. In general, LANL slope stability study results have been used to develop conservative construction practices for building set-back distances from canyon edges that are included in new building design approval processes at LANL. The CMRR EIS does not elaborate on this issue, as both the TA-55 and the TA-6 construction site options are located away from canyon edges in excess of the building construction set-back practices of 50 to 100 feet for south facing and north facing slopes, respectively.

The risk of seismic activity resulting in accidents at LANL nuclear facilities is factored into their design and construction requirements. Design criteria are used to minimize a building's potential for seismic structural damage and operational control criteria are used to limit adverse effect contributions from operations in the event of a high-magnitude earthquake. The combination of building design and operational controls results in nuclear facilities at LANL that would minimize structural damage should a large earthquake occur. Potential radiological impacts from an accident

tents, which certainly cannot be considered safe storage and does not speak for a good record for LANL.	(
The increased waste generated by a new CMRR facility violates the Department of Energy's pollution prevention policy, which requires facilities to reduce	
the volume of waste generated.  Regarding the question of what to do with the current CMR building, demolishing it would create a large amount of radioactive waste because 44,000 square feet of the CMR is contaminated with radioactive material. We do not believe that TA-54 could contain that amount of extra waste, when LANL has not kept up with the current waste (leaving it in fabric tents).  Given the contamination of the current CMR building and its location on a fault trace, it should not be used for administration or any other activities. I question whether it can be demolished without affecting air quality, and so I suggest looking into other alternatives such as encasing it. One suggestion I heard that may make sense is to deposit the waste that needs to be removed from Area G into the existing CMR building and then encase it all.	
TRANSPORTATION  The DEIS Summary only talks about the one-time transport of special nuclear material. But SNM will have to be shipped into the Los Alamos area and the subsequent waste will need to be disposed of. This part of the DEIS is woefully	
inadequate.  Transportation of radioactive material cannot be made totally safe. The DOE expects that there will be a number of transportation accidents, and admits that some accidents will release radiation. New Mexico has one of the highest DWI accident rates of the nation. The NM State Police reported that in 1988, there was an average of one accident nearly every week involving vehicles carrying hazardous waste. As the number of transports has increased, I expect that the number of accidents has also increased. (There was a serious accident with a TRUpact shipment just last August.)	
In the event of a nuclear accident, even the dust in the area will be contaminated. When the dust is inhaled or ingested by people living or working in that area, those people will contract cancer.	

The Health Workers Union reports that they have not been

### Response to Commentor No. 6

6-13

(Cont'd)

6-14

6-15

6-16

6-17

scenario involving a facility-wide spill caused by an earthquake that would severely damage the new CMRR Facility are presented in Sections 4.2.9.2, 4.3.9.2, 4.4.9.2, and Appendix C of the *CMRR EIS*.

The *CMRR EIS* discusses waste management at LANL in Section 3.12 and

6-12: for each of the alternatives analyzed in Sections 4.2.11, 4.3.11, 4.4.11. 4.5.11 and 4.6.11. The 1999 LANL SWEIS analyzed impacts for the expansion of LANL's TA-54, Area G radioactive low-level waste disposal area. The Record of Decision identified the decision to expand Area G so that LANL could dispose of waste well beyond the then estimated date of 2009, when the portion of Area G currently used for low-level waste disposal was expected to reach its fill capacity, although waste minimization may extend this anticipated closure date for the existing Area G site. The issue of lining pits in use at Area G is currently under consideration, although their current unlined condition has not been demonstrated to be an unsafe practice. The CMRR Facility, if constructed, would not become operational until about 2010. As stated in the CMRR EIS regarding wastes generated at LANL, transuranic (TRU) waste will be disposed of at the Waste Isolation Pilot Plant (WIPP) or its replacement facility; hazardous and mixed low-level waste are currently disposed of at commercially available existing facilities or at other DOE sites, as appropriate, and this practice is expected to continue into the foreseeable future, low-level waste will continue to be disposed of at LANL's Area G into the foreseeable future or may be disposed of offsite at commercially available existing facilities, as is also the current practice. Solid waste is currently disposed of at the Los Alamos County landfill and, after its closure in about 2007, will be disposed of at its replacement facility.

6-13: TRU waste is currently stored in aboveground arrays at LANL's Area G within specially designed dome structures. While waste drum storage in these structures is conducted in a safe manner, the ultimate destination for these drums is the WIPP facility. Current schedules for shipments of TRU waste to WIPP from LANL provide for removal of all the drums of TRU waste bound for WIPP to be removed by 2011.

**6-14:** Wastes generated by the new CMRR Facility would be minimized in accordance with LANL's waste minimization and pollution prevention policy. The increase in waste generation alluded to by the commentor would be due to the different level of operations conducted in the new

 $\mbox{\tt deal}$  with nuclear accidents, and hospitals along the routes are not equipped to  $\mbox{\tt deal}$ 

with de-contamination. Every community along the routes needs a self-contained

hospital unit where people can be isolated, tested and washed, and where even the water used for washing will need to be contained so it will not

water used for washing will need to be contained so it will not contained the community's sewer system. All persons who may have to respond,

within each and every section of the route needs to receive full and extensive

every section of the route needs to receive full and extensive training. Sufficient equipment and clothing should be provided in every area. Paper

suits and not sufficient because paper stops alpha particles but not beta or

gamma rays. Alpha

particles are fatal if breathed or ingested. Most of the

particles are fatal if breathed or ingested. Most of the Chernobyl clean-up workers are now dead.

And what about all the other people in the area? Everyone living or working within a  $\hfill \hfill \hfill$ 

five  $\mbox{\sc mile}$  radius all along every route should also be provided with sufficient

protective clothing and masks.

Geiger counters and alpha particle detectors should be stored for easy access all

along the routes. Alpha particle detectors, though quite expensive, are necessary

because plutonium emits alpha particles which cannot be detected by Geiger

counters, and just one alpha particle breathed in by either a volunteer or innocent

bystander will produce cancer in that person. While some of the equipment will be

in the trucks, we cannot rely on that because they could be damaged in a serious

Should a fire occur, a plutonium fire cannot be put out with water  $\ensuremath{\mathsf{--}}$  it needs sand.

Every fire department will need to be supplied with a sufficient amount of sand to  $% \left( 1\right) =\left( 1\right) +\left( 1\right)$ 

handle a serious accident involving fire.

Where is the funding for all of this preparation? Where is the funding for this kind of

clean-up operation needed after an accident? And is there

insurance for all persons exposed during a nuclear transportation accident?

The DOE has also admitted that radiation is emitted from the  $\ensuremath{\mathsf{TRUpact}}$  containers

within a five mile radius as they pass through our towns, even without accidents.

The DOE claims that this amount of radiation will be harmless. But the  $\ensuremath{\text{Petcau}}$ 

effect belies this assertion -- see "NO SAFE LEVEL" below.

The Dept. of Transportation guidelines stress that "the State adequately consider  $% \left( 1\right) =\left( 1\right) +\left( 1\right) +$ 

risk to all those who may be affected by radioactive material transportation." The

numerous safeguards listed above for such transportation have not

Response to Commentor No. 6

facility as compared to the lower, restricted level of operations currently conducted in the existing CMR Building, which do not meet mission goals.

15: The NNSA acknowledges the commentor's concerns regarding the future use of the existing CMR Building for any purpose. Demolition of contaminated buildings is safely conducted under stringent health and safety requirements that also serve to protect the environment from uncontrolled emissions, effluents and releases. Remote handling capabilities are employed where necessary to protect workers and the public from potentially dangerous situations during demolition work. Constructing an aboveground mixed waste site out of the CMR Building to provide for the permanent disposition of that building together with other LANL radiological wastes, as described by the commentor, would not be consistent with state and Federal disposal regulations and DOE Orders regarding disposal of such wastes.

The DEIS and its Summary identify the one-time transportation needed for the initial loading of special nuclear materials (SNM) into a new CMRR Facility from the existing CMR Building, along with routine shipments of samples between the Plutonium Facility and a new CMRR Facility. Adequate inventories of SNM are already present at LANL for ongoing AC and MC operations; no additional SNM would need to be shipped to LANL as a result of a NNSA decision to proceed with the construction and operation of the CMRR Facility at LANL. The shipment of SNM between other DOE sites and LANL that occurs periodically for a variety of purposes was analyzed in the LANL SWEIS. Therefore, no additional analysis of offsite transport of SNM is provided in the CMRR EIS.

The transportation impact assessment as explained in Sections 4.7.1 and 2.9.3 of the *CMRR EIS*, analyzes the one-time movement of SNM, equipment, and other materials during transition from the existing CMR Building to the new CMRR Facility, and the routine onsite transport of AC and MC samples between the Plutonium Facility and the new CMRR Facility. SNM would be transported from the existing CMR Building and from the Plutonium Facility at LANL. The one-time transport of these materials would be performed on restricted and controlled roads that would be closed to the public. Once a shipment is prepared for low speed and controlled movement onsite, the likelihood and consequence of any foreseeable accident are considered to be small.

6-18

6-17

(Cont'd)

been	followed and therefore transporting nuclear material is no where near safe.	
	ENVIRONMENTAL AND HEALTH EFFECTS	
water	The DEIS does not say where the extra 10.4 million gallons of per year will come from.	6-19
and t	<pre>workers)" and "potential impacts to air, water, soil." I consider two issues to be interrelated because a contaminated environment affects human</pre>	
docum nucle envir urani radio	The DETS Summary states that "for the most part, environmental tis would be small." I find that statement to be amazing. It has been ented at every nuclear site and for every stage of production that the making of ar weapons, even if never used, is hazardous to the workers, to our omment, and to people yet unborn. Nuclear production, from the mining and milling of um ore to transportation, actual production, testing and the disposal of active waste, is harmful to the workers, the environment and the public. What the considers "small" is not considered small by the public see "NO SAFE"	6-20
	Radiation weakens our immune system, making it harder for our s to fight off the normal illnesses. It is commonly believed that the higher of allergies in this area is due to contamination from the Los Alamos National Lab.	6-21
damag	In addition to causing diseases such as cancer, arthritis, and ratory or heart problems, exposure to radiation pollution also causes genetic le, resulting in reduced fertility, miscarriages, stillbirths, higher infant lity, deformity, retardation and other abnormalities. The genetic defects are then do not o all succeeding generations. Whenever we damage our own genes, we harm our descendants forever.	
nucle from known	In the 1940s, Loretto Sisters taught children of some of the stists who worked on the Trinity test. The day after the explosion of the first ar bomb, the children brought to school what they called "clinkers," the melted blobs the bomb tower. These clinkers were passed around the school before it was a that they were radicactive. The second definition of "clinker" in the mm Webster Collegiate Dictionary is: "a serious mistake."	
have	This is just one of many examples of how our state and our people been 7	6-22

#### Response to Commentor No. 6

The various wastes generated in the new CMRR Facility are those evaluated in the 1999 *LANL SWEIS* under the Expanded Operations Alternative. The impacts of the disposition of these wastes are also evaluated in the *LANL SWEIS*. Therefore, the impacts from disposition of the generated wastes have already been evaluated and accounted for in the *CMRR EIS*, as part of the site-wide cumulative impacts. (Section 4.8 of the Final *CMRR EIS* has been revised to reference 1999 *LANL SWEIS* for the transportation impacts from disposition of generated wastes.)

The NNSA notes the commentor's views and observations regarding transportation risks within New Mexico. The NNSA expects that there is a finite likelihood that an accident could occur leading to dispersal of radioactive materials during transport. To reduce the likelihood and consequence of a foreseeable accident, NNSA uses a fleet of specially built vehicles called safe and secure transport (SST) vehicles to ship SNM. The SST is essentially a mobile vault that is highly resistant to unauthorized entry and provides a high degree of cargo protection under various accident conditions. Each SST is pulled by an armored, penetration-resistant tractor. Armored couriers in escort vehicles equipped with communications and electronic systems, radiological monitoring and other required equipment accompany each SST to enhance safety and security. All vehicles undergo extensive maintenance checks prior to the trip, as well as, periodic maintenance inspections. "Type B" containers used for such nuclear shipments are Department of Transportation (DOT) and Nuclear Regulatory Commission (NRC) certified packagings that provide protection under both normal conditions of transport and in the event of severe accidents. Notification and coordination between the DOE, NNSA and affected Native American and State governments is made prior to any SST shipments. The required security measures and controlled transport of these materials have resulted in safe transport of these materials, with minimal or no impact to the environment. Communities located along DOE shipment routes participate in training and education programs sponsored by the DOE. These programs include emergency response training to address transport accidents involving nuclear materials and wastes, first responder training, incident command systems training, training for trainers, and medical management training. Exercises to "test the system" are conducted annually. Appropriate equipment for emergency and first responders has been provided to communities through a combination of

contaminated with radiation by the nuclear weapons complex, from uranium mining
to production and testing and transportation and waste disposal.
The people of  New Mexico have had enough of this industry that harms us. We
feel that our government is killing its own citizens in the name of defense!
Using UNSCEAR's (UN Scientific Committee on the Effects of Atomic
Radiation) estimates of ionizing radiation dose to the public from nuclear
activities between 1943 and 1990, Dr. Bertell figures that over 30 million fatalities
and serious injuries have or will result from nuclear activities that took place during
the first five decades
(Planet Earth 2002: A Nuclear Postscript, International Peace Update, March
2002). This is more than 3000 times the death toll from all four terrorist attacks on
Sept. 11, 2001. And this figure will undoubtedly rise after the 1990s are factored in
and as nations continue to produce nuclear weapons, power and waste.
There is already enough contamination danger at LANL. Area G is
an unlined waste dump, where radioactive materials and toxins can eventually
leak into the ground water. There is a toxic plume under area L, where the
Manhattan project dumped its waste. Thyroid cancer in Los Alamos has increased
about 400% during the last decade.
After the Cerro Grande fire, radioactive material was found in the
Rio Grande, the largest fresh water artery in New Mexico. Downstream from LANL,
over 10 million  people use the Rio Grande for drinking, irrigation of crops,
recreation and industry.
LANL downplays the significance of this, because ingesting plutonium is less risky
than breathing plutonium. However, the Centers for Disease Control states in
ToxProfiles that the effects of exposure to water containing plutonium "are not
known." Also, as water evaporates in our desert climate, sediments become dust
and are airborne on windy days.
Radionuclides have been found in produce downwind from the Cerro Grande fire.
While the FDA (Federal Drug Administration) lists the normal amounts of each of
these radionuclides for the same crops as "zero," LANL claims these are normal
amounts of "natural" radiation that would occur after any forest fire. However,
plutonium, americium, strontium 90, cesium 137, U234 and DU are all man-made,
and are only released by the fire because the fire happened in the
area where these contaminants were deposited from testing and dumping by man.
National security requires environmental health. The ordinary New
Mexico citizen

### Response to Commentor No. 6

6-18:

(Cont'd)

6-23

6-24

local, state and Federal funding. DOE emergency response teams are oncall and available for duty at all times.

Funding for emergency preparedness and emergency response is provided through a combination of local, state and Federal funds, as for any necessary subsequent clean-up activities required in the event of accidents. The NNSA is not aware of an automatic Federal or private cancer insurance for persons that may be exposed during a radiological, chemical, or any other hazardous material transportation accident along our nation's highways.

The NNSA notes the commentor's concerns regarding safe transportation of radiological materials along public highways. As discussed in Section 4.7.1 of the *CMRR EIS*, transportation of radioactive materials under the Proposed Action would be conducted within the LANL site, on DOE-controlled roads, under current LANL security procedures. The likelihood of exposure of the general public from routine movement or accidental release of radioactive materials during intrasite transportation activities is remote.

- 6-19: The 10.4 million gallons of water needed for operating the new CMRR Facility would come from the existing Los Alamos water supply that furnishes water to LANL and other Los Alamos County users. This water system is described in Section 3.3.4 of the *CMRR EIS*. The water demand would be phased in as the new CMRR Facility ramped up to its full level of operations, while the water demand of existing CMR Building operations was reduced or completely eliminated over time. Therefore, the water requirement for the new CMRR Facility would not represent an extra demand on the Los Alamos water supply over the long term.
- 6-20: The summary statement characterizing potential environmental impacts of a new CMRR Facility as "small" is correct. The CMRR EIS considers direct, indirect and cumulative impacts related to the proposed action alternative and for the No Action Alternative. The CMRR Facility would not be a mining, milling, production, testing or disposal site for nuclear weapons, as suggested by the commentor. LANL is operated under an Integrated Safety Management System designed to achieve operational effectiveness through the integration of environmental compliance, quality assurance, risk assessment and mitigation, and safety and health protection

does not feel secure when the production and testing of nuclear with disposal of consequent waste, pollutes our land, water and air, making us ill, killing some of us and causing birth defects in our children. The weapons, rather than helping us feel secure, harms all of us, and not just today but for generations to come. NO SAFE LEVEL Since no part of the weapons-producing process can avoid exposing the workers to some degree of radiation, governmental agencies have set radiation exposure. However, these "permissible" levels are really the levels of illness and deformed children which they, the regulatory agencies, think the public will accept in return for the supposed benefits of nuclear technology. Today most scientists agree that the effects of low-level radiation are much we were originally aware of -- 1000 times more damaging than is commonly believed. Many radiobiologists agree with Dr. Bertell that any degree of exposure to radioactive particles causes some biological damage and that there is no level of radiation exposure that can truly be called safe, especially when it is continuous over a specific area. This is mainly because radiation effect. Item #10 of "Issues for Analysis" for the previous scoping CMRR "cumulative impacts of the Proposed Action" as an issue to be considered. The Petcau study conducted by the Canadian Atomic Energy Dept. proved radiation has a cumulative effect in the body -- each time you are exposed, it builds up in your body. Each of us who lives or works or goes to school near a nuclear facility or along a nuclear transportation route is exposed to again and again, until the radiation build-up is no longer a safe level and produces cancer or genetic defects in our bodies. Children, pregnant women citizens are especially susceptible. When Dr. Bertell first began publishing her results, showing that the effects of low-level radiation are much more lethal than previously thought,

funding was cut off because the government did not want such

started reporting similar results, and a few, including Dr.

A shocking number of other scientists also lost their funding or

her government

American public.

Response to Commentor No. 6

6-24 (Cont'd)

6-25

procedures, incorporated by design into work planning and implementation of those plans. The CMRR Facility would be operated in accordance with the LANL management system.

- 6-21: The NNSA notes the commentor's statement regarding the attribution of a higher rate of allergies in the Los Alamos area to LANL site contamination. The effects of radiation on human health and the environment have been studied by a large number of scientific groups and individuals. These studies have been sponsored by a variety of organizations, including the U.S. Government, the United Nations, foreign governments, medical researchers, and independent scientific groups, such as the International Commission on Radiation Protection (ICRP). These studies fail to confirm scientific knowledge of such a cause-and-effect relationship. Arthritis, respiratory and heart problems are predominantly attributed to etiologies other than radiation exposure(s).
- **6-22:** The NNSA notes the commentor's statements regarding New Mexico State residents and their opinions and feelings about the nuclear industry and national defense.
- The commentor's statement regarding thyroid cancer in Los Alamos refers 6-23: to a 1996 report prepared by William F. Athas, PhD, of the New Mexico Department of Health. The author conducted an epidemiologic investigation to document in detail the recent excess cases of thyroid cancer in Los Alamos County were thyroid cancers had increased four-fold, and to explore possible causes. Information regarding cases of thyroid cancers diagnosed between 1988 and 1995 was collected. The author stated as a conclusion to his study that, "...the results cannot be used to measure risk, which is usually the main desire of communities identified as having a high cancer rate." And, also, "The epidemiologic investigation described in this report did not identify a specific cause for the unusually high number of recent thyroid cancers in LAC [Los Alamos County]. The likelihood is that the recent excess had multiple causes, some of which have been examined in this study, and some of which may never be identified. This has been the general experience of investigation of excess cancer in communities across the nation." Since the study was completed in 1995, the rate of Los Alamos County thyroid cancer cases has dropped and the overall cancer rate for Los Alamos County is now below the national

Bertell, have survived suspicious life-threatening "accidents." Dr. Robert March's testimony on April 9, 1990, (WIPP route hearing) included evidence of the U.S. government's pattern of deliberately keeping the health effects of radiation secret from the American public. Dr. Bertell also uncovered a great deal of evidence of the U.S. government's pattern of deliberately effects of radiation secret. One was an Atomic Energy Commission memo which recommended suppression of studies by Public Health Services "would cause adverse public reaction and law suits, and would testing program." Dr. Bertell discovered case after case where the DOE lied to people involved in nuclear work. Many of us in the general public can no longer believe the DOE. State Senator Payne told us during a Legislative Oversight Committee meeting (Aug. 21,02) that the committee could not comment on the issue of nuclear weapons because so much of it is "classified." The DOE has a habit of calling "Classified" any information that they do not want the I recommend Dr. Bertell's book No Immediate Danger: Prognosis for Earth, The Women's Press, 229 College St. #204, Toronto, Ontario, documentation of secrecy regarding nuclear hazards. The Los Alamos National Lab has been insisting for a decade now that they had no intention of taking over the plutonium trigger-pit production work now they may build a new facility to do just that. Claiming that it is different from Rocky Flats because they will manufacture fewer trigger-pits per change the essential work. It is the production itself that it hazardous, even if LANL only made one new bomb trigger-pit per year. LANL and the DOE often use misleading language. For example, LANL years been telling the public that they are not making any "new" weapons, but they
define "new" so unusually that it is not what the general public means by "new." LANL, along with every other nuclear weapons plant, has a history of accidents. radiation leaks, coverups and lies. Last August there was another about LANL employees complaining that the Lab does not take their safety concerns seriously, and I attended a town meeting in Los Alamos Congressman Tom Udall where a current LANL employee talked about frustration with this issue.

### Response to Commentor No. 6

average according to statistics published by the National Cancer Institute (available at: http://satecancerprofiles.cancer.gov).

There have always been radionuclides in the waters of the Rio Grande. The river flows through geologic formations containing naturally occurring radioactive materials and picks up some amount of radioactive material from the rocks. Worldwide radioactive fallout from global weapons testing and other events is also present across the Rio Grande watershed and contributes to the river's waterborne radionuclide load as well. Fires give off radioactive particles from burning vegetation that have taken up radionuclides from the surrounding soils - in the Rocky Mountain reach this uptake includes both naturally occurring and man-made radionuclides. LANL researches have been sampling surface water, soils, vegetables and fruits from upwind/upstream areas and downwind/downstream areas of LANL for years. After the Cerro Grande Fire, many samples of media were obtained from various locations upwind/upstream and downwind/ downstream of LANL, including vegetables and fruits grown in areas where the public identified particular concerns about possible contamination as a result of the Cerro Grande Fire. Levels of radionuclides in produce grown downwind of the Cerro Grande Fire smoke plume, in particular, were found to be the same as historical background levels obtained in produce examined before the Cerro Grande Fire. The location of the fire burning partially across LANL did not significantly affect the release of radionuclides that occurred as a result of the fire as stated by commentor (see LANL's annual Environmental Surveillance reports for additional information about LANL area media sampling results).

- **6-24:** The NNSA notes the commentor's beliefs about the relationship between nuclear weapons production and national security.
- 6-25: As previously stated, the effects of low-level radiation on workers, the public and the environment have been studied by a large number of scientific groups and individuals including the ICRP. All of the U.S. Government agencies involved in radiation protection, including DOE, EPA, and the NRC, base their work upon guidance established by Presidential Directive. This guidance follows the recommendations of the ICRP, as do the regulations of essentially all other nations. This is indicative of the global acceptance by the world-wide scientific and safety communities of the authoritative recommendations made by the ICRP

So we the people of New Mexico do not trust the Department of Energy or LANL to
tell us the truth or to keep our health and safety a priority.
ENVIRONMENTAL JUSTICE
The DEIS Summary Table S-3 concludes "no disproportionately high and adverse $$
impacts on minority or low-income populations. The glossary did not include a
definition of "minority." In its EA for the BSL-3, LANL lists the Hispanic population
as "white" so that the surrounding population does not appear to be minority. A
national survey of sites for the production, testing of nuclear weapons and disposal
of radioactive waste shows that most have been located in low-income minority
communities, an example of severe environmental racism.
SOCIOECONOMICS
The DEIS Summary Table S-3 considered only whether or not there
was an increase in workforce. That is not the only criteria for
considering socioeconomic impacts. We need to look at the total picture. Most NM citizens
remain in the low-income range. We have one of the highest percentages of
children living in poverty. LANL is not really helping the economy of New Mexico.
On the contrary, there have been a number of studies which show that when defense
industry has
moved out of an area, civilian industry moved in and the general economy of the
area improved. In one study conducted by the U.S. government of 100 military
bases that had been closed around the country, in 98 of these areas, civilian
industry had been developed and had brought an increase in the economy of the
local community. Read Economics of Military Spending and Need for Conversion
by Richard C. Williams, Ph.D.
The 2004 military budget is the second highest ever. Pax Christi studies show that
every billion dollars spent on arms means a loss of more than 2000 civilian
jobs. Our nation spends more of our tax dollars on the military
than on housing, education, social welfare, food, employment, transportation,
energy and environmental programs combined. As a result, one in four U.S.
children now lives in poverty, and New Mexico's children rank high on the poverty
scale. As Eisenhower said, the money spent on nuclear weapons production has
in effect been stolen from the poor.
National security also requires economic vitality with healthy and
well-educated citizens. New Mexico citizens do not feel secure when we cannot
find employment,

### Response to Commentor No. 6

6-26

6-27

6-28

regarding radiation doses and cancer induction risk factors. The methodology for analyzing the health effects from ionizing radiation is presented in Section B.2.2 of Appendix B in the *CMRR EIS*. As explained in Section B.2.2, there is currently scientific uncertainty about cancer risk in the low-dose region below the range of epidemiologic observation, and the possibility of no risk cannot be excluded.

- **6-26:** The NNSA notes the commentor's statements regarding the lack of public trust of DOE.
- 6-27: Definitions of the terms "minority population" and "low-income populations" have been added to the glossary of the Summary document; the terms were defined in glossary of the DEIS and discussed in detail in Appendix D of this EIS. As described in Section D.2, all persons self-identified as Hispanic or Latino (of any race) are counted among the minority population in the *CMRR EIS* analyses. As described in Section D.4, among all counties in New Mexico, Los Alamos County has the smallest percentage of persons living below the poverty threshold and the smallest percentage of minority residents; the residents of Los Alamos County live in closer proximity to LANL than do the residents of any other New Mexico county.
- 6-28: The NNSA opines that the economy of New Mexico is helped by LANL. Should LANL cease to employ over 12,000 people in direct jobs, many of which are highly specialized and require advanced education, civilian industry would not readily move into the area given its location, lack of transportation (specifically, cargo jet, aircraft service, train service, or interstate highway service), and lack of readily available raw materials. A more likely scenario resulting from LANL closure would be that local communities near LANL would suffer and that the overall economy of New Mexico would diminish.

cannot afford health insurance, or cannot pay the rent, and when

our youth who will run our nation tomorrow cannot read or figure basic math problems

We would feel much more secure if those millions of dollars would be spent on the necessities of life -- affordable housing, renewable

energy, high-quality education, meaningful employment, accessible health care, and

adequate nutritional food for everyone.

CONCLUSION

In addition to nuclear weapons being illegal, they are also immoral and are  $% \left( 1\right) =\left( 1\right)$ 

condemned by all the major religions because they murder and injure many

innocent civilians as well as harm the environment. Two thousand Catholic bishops gathered at the Second Vatican Council published their opposition

explaining that the use of nuclear weapons "is a crime against God and humanity itself."

Each time that I speak about the evil of nuclear weapons, someone

in the nuclear industry tells me that s/he is not an evil person. I grant that the people involved are

mostly good people. But so were the Germans who cooperated with the Nazis. It is easy for good people to get caught in an evil system.

There is one place in the Bible where Jesus tells us what we will be asked when our  $\hdots$ 

personal Judgment Day comes. I challenge each of you involved in any part of the  $$\operatorname{\mathsf{CMRR}}$  plan to imagine your last day on this earth as you prepare to

CMRR plan to imagine your last day on this earth as you prepare to meet your Creator. You will be asked if you fed the hungry, if you helped

the poor and the disadvantaged. Or did you participate in the use of tax moneys

for expensive illegal weapons, preventing the poor and disadvantaged from receiving the help they

The Loretto Community nationally is opposed to the new CMRR

facility. Our position is that all weapons of mass destruction should be

dismantled, that the United States needs to take the lead in promoting world-wide nuclear disarmament,

and that all peoples need to find ways to solve conflicts without resorting to killing or damaging the earth's environment.

To use the killing of people as a means to settle disputes is

uncivilized behavior.

We encourage LANL to lead the world in resolving conflicts without killing innocent

people to whom God has given life. It is time to use our great technology, funds and

brilliant scientists to find peaceful means for settling the differences among us on this planet.

Response to Commentor No. 6

**6-29:** The opposition of the national Loretto Community to the new CMRR Facility is noted.

6-29

The Los Alamos National Lab could become an exciting international center for research in such areas as medicine, mass transit systems, waste management, and alternative energy sources. I call upon you to lead our country in the development of true national security, the kind of security that comes from a thriving economy and a healthy environment.

Penelope McMullen Sisters of Loretto